

REMARKS

This amendment is being filed in response to an Office Action mailed 04/07/2006, along with a request for a time extension and a Request for Continued Examination. In the Office Action, the Examiner said that claims 1-42 were pending but rejected. In this Amendment, claims 42 and 43 are corrected to indicate that they depend upon method claims, new claims 43-49 are added, and various reasons for rejection given by the Examiner are traversed below.

Claims Rejected under 34 USC §103

The Examiner additionally said that claims 1-38 were rejected under 35 USC §103(a) as being unpatentable over U.S. Pat. No. 6,085,323 to Shimizu et al. in view of U.S. Pat. No. 6,032,258 to Godoroja et al.

Like the Applicant's invention, the apparatus of Shimizu et al. uses cryptographic operations provided within a device attached to a portable computing system and within the portable computing system itself to determine whether restricted access to certain information or operations is allowed. However, the apparatus of Shimizu et al. requires the device to be mechanically attached to the portable computing system, or at least in communication with the portable computing system by means such as infrared, radio, or optical communication at the time the restricted access is provided, as described in column 8, lines 19-25, and column 9, lines 12-19. Furthermore, the device attached to the portable computing system in the apparatus of Shimizu et al. is an IC (integrated circuit) card storing a master key. As described in column 7, lines 39-48, the security of data stored in the portable computer system is provided during storage of the portable computing system, because the IC card is stored separately from the portable computing system. The data is then inaccessible without the IC card, even if the portable computing system is stolen and taken apart.

On the other hand, the Applicant's invention allows the restricted access to be provided while the portable computer is removed from the other device, which is described as a base computing system, and not in communication with this base computing system, so long as a timer set by the portable computer user is running. This also allows an organization operating the base computing system to have meaningful control over the security of its data in the form of data stored on the personal computing system.

These differences provide significant advantages for the Applicant's invention. If the user goes on a trip, he can take his portable computing system along, using a base computer remaining at a home location to validate that he is the one using the computer on a periodic basis. With the invention of Shimizu et al, he has to carry the IC card device along for attachment, or at least communication whenever he uses the personal system for restricted access. This makes the other computing device of Shimizu et al. more like a mechanical key that must be carried and inserted to operate the computing system. If the portable computing system and the other device must be carried and used together, it is likely that they will be lost together, and that a thief may then be able to access the restricted data. With the Applicant's invention, the other device is left at a home location, so that it is not lost with the portable computing system, a person stealing or finding the portable computer system cannot perform the method with the base computer, and the user can notify the base system if the portable computing system becomes lost.

The invention of Godoroja et al., which has nothing to do with preserving data security after a portable computer system has been lost, provides a method for determining if a packet has been transmitted by a particular system at a recent time.

The Applicants respectfully submit that a prima facie case of obviousness cannot be established by combining the teachings of Shimizu et al. and Godoroja et al. because there is no suggestion or incentive in Shimizu et al. to include the teachings of Godoroja et al., since the devices of Shimizu et al. are connected for direct communication with one another, instead of for connection over a network. The method of Godoroja et al. is useful only for packet connections occurring over a network, in which transmission among various nodes of the network may cause one of the nodes to receive a data packet that is too old to be properly considered as a part of the multi-packet message being received. There is nothing in the teachings of Shimizu et al. to indicate that the portable computer would be used in a network, and certainly nothing to suggest that a network should be placed between the portable computer and the IC card storing the master key. In this regard, the Applicants cite *ACS Hosp. Sys., Inc. v. Montefiore Hosp.* 221 USPQ 929, 932, 933 (Fed. Cir. 1984)

Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under section 103, teachings of references can be combined only if there is some suggestion or incentive to do so. The prior art of record fails to provide any such suggestion or incentive.

In the above-mentioned Office Action, the Examiner has said that it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the methods of Godoroja et al and Shimizu et al. as the both use features of a portable and base computing systems and timer functionalities within the same field of endeavor (connecting to and accessing secure data during specified time) and with the same problem sought to be solved (verifying that the rightful users are in possession of computer systems before features are enabled within a time measure).

Regarding the above statement, the Applicants respectfully submit that is nothing in Shimizu et al. to suggest that a timer functionality is to be employed. The data is decoded whenever the IC card is plugged into the portable computer, and it cannot be decoded whenever the IC card is not plugged into the portable computer. There is no requirement for the use of a timer to determine how long the IC card has been plugged or unplugged. The Applicants further submit that, in the method of Godoroja et al., the timer is merely used to determine that a data packet has been bouncing from one packet to another so long that it should not be considered a part of the information currently being received.

Regarding claim 1 and 39, in the above-mentioned Office Action, the Examiner said that Shimizu et al. does not teach the following, but that Gordoroja et al. teaches:

resetting a timer within said portable computing system to run for a specified time (*see column 3, lines 15 - 16: where each node maintains a time reference*) ; and

providing access to said secure data only when said timer is running (*see column 6, lines 15 - 16: where all data transmissions have time reference, if not it is considered invalid*).

Regarding the above statement by the Examiner, the Applicants respectfully submit that Godoroja et al. does not describe the requirements for:

resetting a timer within said portable computing system to run for a specified time; and

providing access to said secure data only when said timer is running

Instead, Godoroja et al. describes a method for comparing the time when a message is transmitted with the time when it is received. As described in column 3, lines 15-25, of Godoroja et al., each of the nodes has access to a clock mechanism that provides a time reference, with the clock mechanism being

either resident in each of the network components, or with the each of the network components having its own clock mechanism. The "age" of the information packet is determined by calculating a difference between two clock measurements, as described in column 4, lines 57-60, or alternately as described in column 5, lines 7-13. Thus, the clock mechanism must run constantly; it is never reset to run for a specified time. Furthermore, since the clock mechanism is running constantly, Godoroja et al. does not teach providing access to secure data only when a timer is running. Instead, Godoroja et al. provides access to an individual packet of data only when the difference between the two measured times is less than a predetermined value.

For the reasons described above, the Applicants further respectfully submit that claim 1 is patentable under 35 USC §103(a) over Shimizu et al., in view of Godoroja et al.

Regarding claims 2-5, the Applicants respectfully submit that, since these claims merely add limitations to claim 1, which is believed to be patentable as described above, these claims are patentable under 35 USC §103(a) over Shimizu et al., in view of Godoroja et al.

Regarding claim 6, since Godoroja et al. calculates a difference between two times, not a time remaining, as explained in detail above regarding claim 1, and since Shimizu et al. does not deal with a time remaining, the Applicants respectfully submit that Shimizu et al. and Godoroja et al. do not teach, describe, or anticipate the requirements of this claim for .

said timer includes a timer register storing a number corresponding to a time remaining,

said number corresponding to a time remaining is decremented in response to a series of timing pulses generated within said portable computing system, and

setting said timer includes storing a number corresponding to said specified time in said timer register.

In the above-mentioned Office Action, the Examiner has disagreed with this argument, saying that she believes that a predetermined time is set therefore if the packet is not deemed as invalid for not arriving in the predetermined time then it is valid as being received before or within the predetermined time has expired. However, the Applicant respectfully submits that there is no reason for Godoroja et al. to calculate or store a time remaining. He merely subtracts a number corresponding to the time at which a packet was received from a number corresponding to the time at which the packet was transmitted. In order to calculate this difference, these two numbers must be measured using clocks that are synchronized. Hence, the portable computer must have a clock that is synchronized with the clock of the computer transmitting the packet---this is the clock that the Applicant has said must be always running, at least while the data packets are being transmitted and received---or the portable computer must have access over the communications channel to the clock of the computer transmitting the packet. With either method, there is no reason to calculate a time remaining.

Therefore, and additionally because claim 6 merely adds these requirements to claim 1, which is believed to be patentable as described above, the Applicants respectfully submit that claim 6 is patentable under 35 USC §103(a) over Shimizu et al., in view of Godoroja et al.

Regarding claim 7 and 40, since the timer of Godoroja et al. is always running, or at least always running while packets are being transmitted and received, as explained in detail above regarding claim 6, and since Shimizu et al. does not describe a timer, as explained above in detail regarding the rejection of claim 1,

the Applicants respectfully submit that Shimizu et al. and Godoroja et al., taken separately or in combination, do not describe the limitations of this claim for:

- setting a timer within said portable computing system to run until said specified time has expired;
- determining if said timer is running; and
- providing access to said secure data only when said timer is running.

In this regard, the Applicant additionally notes that there is no reason for Godoroja et al. to set a timer to run until a specified time. Instead, the timer of Godoroja et al is set to remain running, with the arrival time for each packet being calculated.

Therefore, the Applicants respectfully submit that claim 7 is patentable under 35 USC §103(a) over Shimizu et al., in view of Godoroja et al.

Regarding claims 8 and 9, since these claims merely add limitations to claim 7, which is believed to be patentable as described above, the Applicants respectfully submit that these claims are patentable under 35 USC §103(a) over Shimizu et al., in view of Godoroja et al.

Regarding claim 10, since Godoroja et al. calculates a difference between two times, not a time remaining, as explained in detail above regarding claim 1, and since Shimizu et al. does not deal with a time remaining, the Applicants respectfully submit that Shimizu et al. and Godoroja et al., not having a need for a register storing a number corresponding to a time remaining, do not teach, describe, or anticipate the requirements of this claim for.

said timer includes a timer register storing a number corresponding to a time remaining,

said number corresponding to a time remaining is decremented in response to a series of timing pulses generated within said portable computing system, and

setting said timer includes storing a number corresponding to said specified time in said timer register.

Therefore, and additionally because claim 10 merely adds these requirements to claim 7, which is believed to be patentable as described above, the Applicants respectfully submit that claim 10 is patentable under 35 USC §103(a) over Shimizu et al., in view of Godoroja et al.

Regarding claims 11 and 12, since these claims merely add limitations to claim 7, which is believed to be patentable as described above, the Applicants respectfully submit that these claims are patentable under 35 USC §103(a) over Shimizu et al., in view of Godoroja et al.

Regarding claim 13, since Shimizu et al. does not describe the use of a timer, and since Godoroja et al. teach only the use of a timer that is continuously running without being reset, as described above in reference to the rejection of claim 1, during the process described within the patents, Shimizu et al. and Godoroja et al. do not teach the requirements of this claim for said timer to be set within said portable computing system in response to receiving a determination that said present password matches said stored password.

In the above-mentioned Office Action, the Examiner disagreed with this argument, saying that , “based on the verification of the password (verifying the matching of the present one with the stored one), the time reference is initialized The password is also interpreted to be the approval code needed to be initialized the time reference. (see column 2, lines 24-2; column 3, lines 7-10 and column 6, lines 15-18).

Regarding this statement, the Applicants note that, in column 3, lines 15-21, Godoroja, et al. says:

Each of the nodes shown in FIG. 1 has access to a clock mechanism (not shown) that maintains a time reference. A clock mechanism may be resident in each individual network component. Alternatively, the network components may have access to a central clock mechanism. In any event, it is essential that the network components share reference to a common time frame.

The Applicants further note that, in the disclosure of Godoroja, et al., all references to a clock are made to this clock mechanism, which is used to establish the parameters in a calculation to determine the length of time between the transmission of a packet and its arrival at a node. Since this clock mechanism is used each time a packet is received, there is no reason to reset or start; in fact the success of this use of a clock relies on its not being reset or restarted, so that it can continue to be used to determine an accurate difference between times measured at the various nodes. It is additionally noted that Shimizu et al. does not mention a clock mechanism.

Therefore, the Applicants respectfully submit that Shimizu et al. and Godoroja et al. do not teach or otherwise anticipate the requirement of claim 13 for the timer to be set within the portable computing system only in response to a determination that the present password matches the stored password.

Therefore, and additionally because claim 13 merely adds this requirement to claim 7, which is believed to be patentable as described above, the Applicants respectfully submit that claim 14 is patentable under 35 USC §103(a) over Shimizu et al., in view of Godoroja et al.

Regarding claim 14, since Shimizu et al. does not describe the use of a timer, and since Godoroja et al. teach only the use of a timer that is continuously running without being reset during the process described, as explained in detail above regarding claim 13. Shimizu et al. and Godoroja et al. do not teach the requirements of this claim for said timer to be set within said portable computing system in response to receiving said approval code. Therefore, and additionally because claim 13 merely adds this requirement to claim 7, which is believed to be patentable as described above, the Applicants respectfully submit that claim 14 is patentable under 35 USC §103(a) over Shimizu et al., in view of Godoroja et al.

Regarding claim 15, since this claim merely add limitations to claim 14, which is believed to be patentable as described above, the Applicants respectfully submit that claim 15 is patentable under 35 USC §103(a) over Shimizu et al., in view of Godoroja et al.

Regarding claim 16 and 41, since Shimizu et al. does not describe the use of a timer, and since Godoroja et al. teach only the use of a timer that is continuously running without being reset during the process, as described in detail above in reference to the rejection of claim 13, Shimizu et al. and Godoroja et al. do not teach the requirements of this claim for:

- setting said timer to run until said specified time has expired;
- determining if said timer is running; and
- providing access to said secure data only when said timer is running.

Therefore, the Applicants respectfully submit that claim 16 is patentable under 35 USC §103(a) over Shimizu et al., in view of Godoroja et al.

Regarding claims 17 and 25, since Godoroja et al. calculates a difference

between two times, not a time remaining, as explained in detail above regarding claim 1, and since Shimizu et al. does not deal with a time remaining, the Applicants respectfully submit that Shimizu et al. and Godoroja et al., not having a need for a register storing a number corresponding to a time remaining, do not teach, describe, or anticipate the requirements of this claim for.

said first storage means includes a timer register storing a number corresponding to a time remaining,

said number corresponding to a time remaining is decremented in response to a series of timing pulses generated within said portable computing system, and

setting said timer includes storing a number corresponding to said specified time in said timer register.

Therefore, and additionally because claims 17 and 25 merely add these requirements to claim 16, which is believed to be patentable as described above, the Applicants respectfully submit that claim 17 and 25 are patentable under 35 USC §103(a) over Shimizu et al., in view of Godoroja et al.

Regarding claims 18-21, since these claims merely add limitations to claim 17, which is believed to be patentable as described above, the Applicants respectfully submit that these claims are patentable under 35 USC §103(a) over Shimizu et al., in view of Godoroja et al.

Regarding claims 21-24 and 26-28, since these claims merely add limitations to claim 16, which is believed to be patentable as described above, the Applicants respectfully submit that these claims are patentable under 35 USC §103(a) over Shimizu et al., in view of Godoroja et al.

Regarding claim 29, since Shimizu et al. does not describe the use of a timer, and since Godoroja et al. teach only the use of a timer that is continuously

running without being reset, as described above in reference to the rejection of claim 1, during the process described within the patents, Shimizu et al. and Godoroja et al. do not teach the requirements of this claim for setting a timer to run until a specified time has expired, and that therefore, claim 29 is patentable under 35 USC §103(a) over Shimizu et al., in view of Godoroja et al

In the above-mentioned Office Action, the Examiner disagreed with the argument that Shimizu et al. and Godoroja et al do not teach setting a timer to run until a specified time has expired, indicating that the predetermined window of acceptable time of Godoroja et al. will inherently expire.

Regarding this statement, the Applicant respectfully submits that the fact that a period of time will inherently expire does not imply that the expiration of the period of time has to be measured by setting a timer at the beginning of the time and resetting the timer at its expiration. In fact Godoroja et al. describes each node as having a timer that runs in synchronization with the timer in the node from which a packet is sent, so that the time of sending can be subtracted from the time of arrival to determine the age of the packet. This would be done for each of many packets without ever resetting the timer.

Regarding claims 30-34, since these claims merely add limitations to claim 29, which is believed to be patentable as described above, the Applicants respectfully submit that these claims are patentable under 35 USC §103(a) over Shimizu et al., in view of Godoroja et al.

Regarding claim 35, 37, and 42-43 since Shimizu et al. does not describe the use of a timer, and since Godoroja et al. teach only the use of a timer that is continuously running without being reset, as described above in reference to the rejection of claim 1, during the process described within the patents, Shimizu et al. and Godoroja et al. do not teach the requirements of these claims for setting a

timer within said portable computing system to run for said specified time, wherein said access to secure data is provided only when said time is running

Regarding claims 36 and 38, since these claims merely add limitations to claim 35 and 37, respectively, which are believed to be patentable as described above, the Applicants respectfully submit that these claims are patentable under 35 USC §103(a) over Shimizu et al., in view of Godoroja et al.

New Claims

In this amendment, new claims 44-39 are added, with limitations taken from claims 1-6, as originally filed to a portable computer system including processor means executing a security timer program as described in the method of the original claims.

Support for this new claim is found in the specification as originally filed on page 7, line 26, through page 8, line 1, and on page 9, lines 22-30.

in the above-mentioned Office Action, the Examiner said that Shimizu et al. does not teach the following, but that Gordoroja et al. teaches:

resetting a timer within said portable computing system to run for a specified time (*see column 3, lines 15 - 16: where each node maintains a time reference*) ; and

providing access to said secure data only when said timer is running (*see column 6, lines 15 - 16: where all data transmissions have time reference, if not it is considered invalid*).

Regarding the above statement by the Examiner, the Applicants respectfully submit that Godoroja et al. does not describe the requirements for:

resetting a timer within said portable computing system to run for a specified time; and

providing access to said secure data only when said timer is running

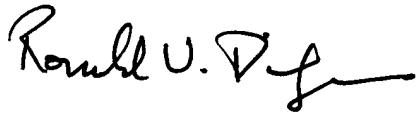
Instead, Godoroja et al. describes a method for comparing the time when a message is transmitted with the time when it is received. As described in column 3, lines 15-25, of Godoroja et al., each of the nodes has access to a clock mechanism that provides a time reference, with the clock mechanism being either resident in each of the network components, or with the each of the network components having its own clock mechanism. The "age" of the information packet is determined by calculating a difference between two clock measurements, as described in column 4, lines 57-60, or alternately as described in column 5, lines 7-13. Thus, the clock mechanism must run constantly; it is never reset to run for a specified time. Furthermore, since the clock mechanism is running constantly, Godoroja et al. does not teach providing access to secure data only when a timer is running. Instead, Godoroja et al. provides access to an individual packet of data only when the difference between the two measured times is less than a predetermined value.

For the reasons described above, the Applicants further respectfully submit that new claims 46-49 are patentable under 35 USC §103(a) over Shimizu et al., in view of Godoroja et al.

Conclusions

The Applicants respectfully submit that the application, including claims 1-49 is now in condition for allowance, and that action is respectfully requested, with reconsideration and withdrawal of all reasons given for objections and rejections.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Ronald V. Davidge". The signature is fluid and cursive, with a long horizontal stroke at the end.

Ronald V, Davidge

Registration No. 33,863

Telephone No. 954-344-9880

September 7, 2006